

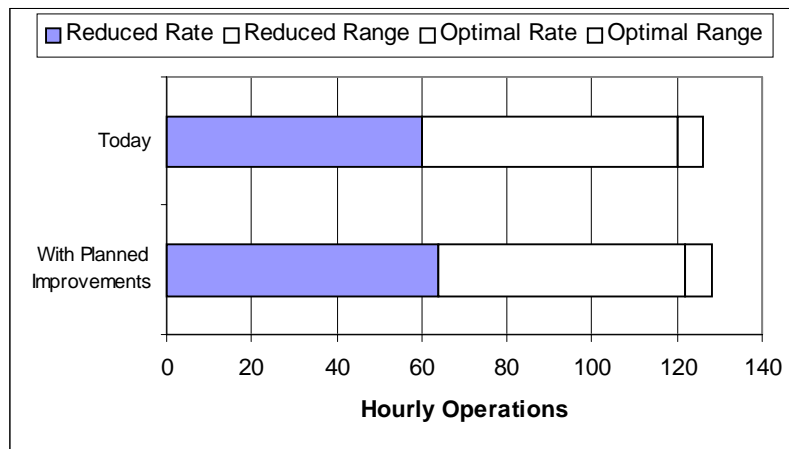
Honolulu International Airport Benchmarks

- The current capacity benchmark at Honolulu is 120-126 flights per hour in good weather.
- Current capacity falls to 60 flights (or fewer) per hour in adverse weather conditions, which may include poor visibility, unfavorable winds, or heavy precipitation. Such conditions exist only about 1% of the times.
- Because of the predominately good weather in Hawaii, hardly any flights are delayed more than 15 minutes.
- Technology and procedural improvements are expected to increase Honolulu's capacity benchmark by 2% (to 120-128 flights per hour) in good weather over the next 10 years.
- The adverse weather capacity benchmark will increase by 7% (to 64 flights per hour) over the same period.
- These capacity increases could be brought about as a result of:
 - ADS-B/CDTI (with LAAS), which provides a cockpit display of the location of other aircraft and will help the pilot maintain the desired separation more precisely.
 - FMS/RNAV routes, which allow a more consistent flow of aircraft to the runway.
- According to the FAA's Terminal Area Forecast, demand at Honolulu is expected to grow by 25% over the next decade. However, since today's operation is so far below the good weather capacity, future delays are only an issue in adverse weather.

Airport Capacity Benchmarks – These values are for total operations achievable under specific conditions:

- **Optimum Rate** – Visual Approaches (VAPS), unlimited ceiling and visibility
- **Reduced Rate** – Most commonly used instrument configuration, below visual approach minima

Scenario	Optimum Rate	Reduced Rate
Today	120-126	60
New Runway	N/A	N/A
With planned improvements	122-128	64



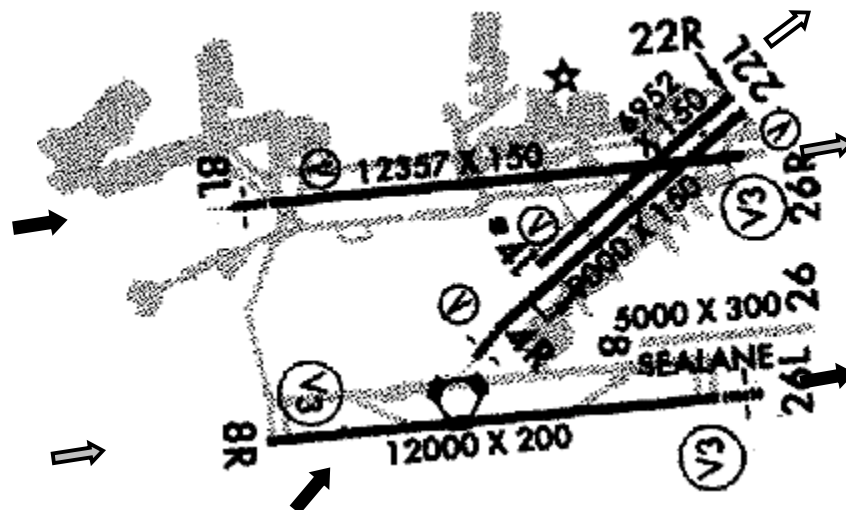
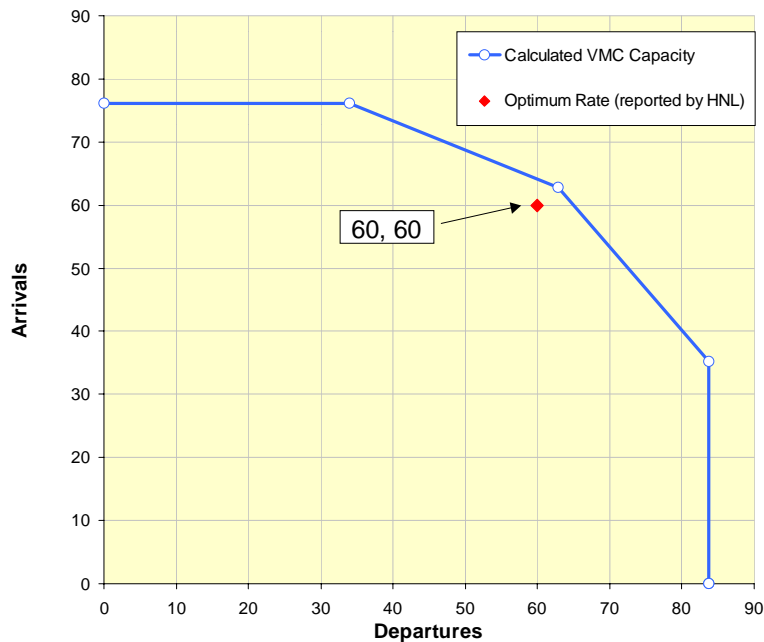
- The benchmarks describe an achievable level of performance for the given conditions, which can occasionally be exceeded. Lower rates can be expected under adverse conditions. Note: In some cases, facilities provided separate unbalanced maximum arrival and departure rates.
- Planned Improvements include:
 - ADS-B/CDTI (with LAAS) – provides a cockpit display of the location of other aircraft. This will help the pilot maintain the desired separation more precisely.
 - FMS/RNAV Routes – allows more consistent delivery of aircraft to the runway threshold.
- Benefits from Planned Improvements assume that all required infrastructure and regulatory approvals will be in place. This includes aircraft equipage, airspace design, environmental reviews, frequencies, training, etc. as needed.
- **Note:** These benchmarks do not consider any limitation on airport traffic flow that may be caused by non-runway constraints at the airport or elsewhere in the NAS. Such constraints may include:
 - Taxiway and gate congestion, runway crossings, slot controls, construction activity
 - Terminal airspace, especially limited departure headings
 - Traffic flow restrictions caused by en route miles-in-trail restrictions, weather or congestion problems at other airports

These values were calculated for the Capacity Benchmarking task and should not be used for other purposes, particularly if more detailed analyses have been performed for the individual programs.

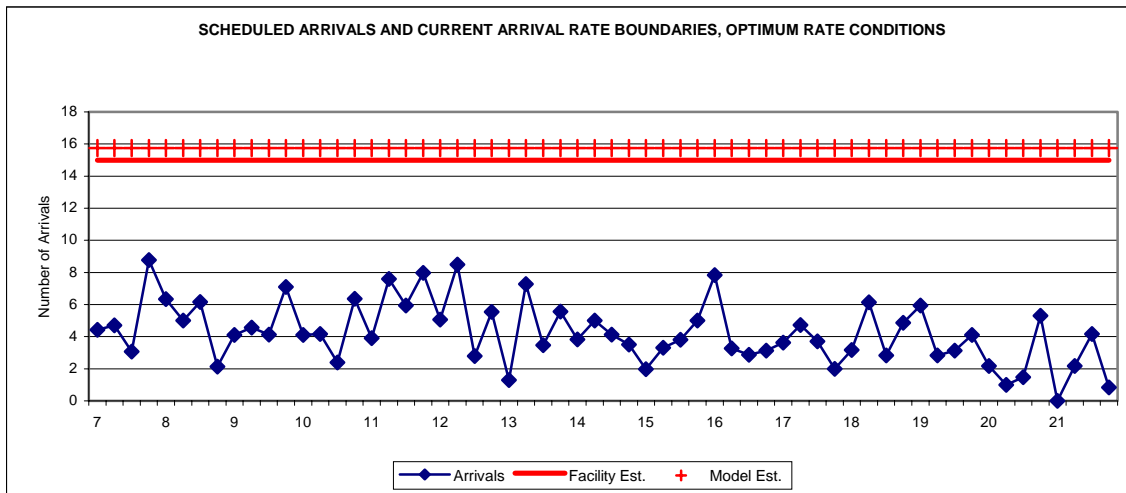
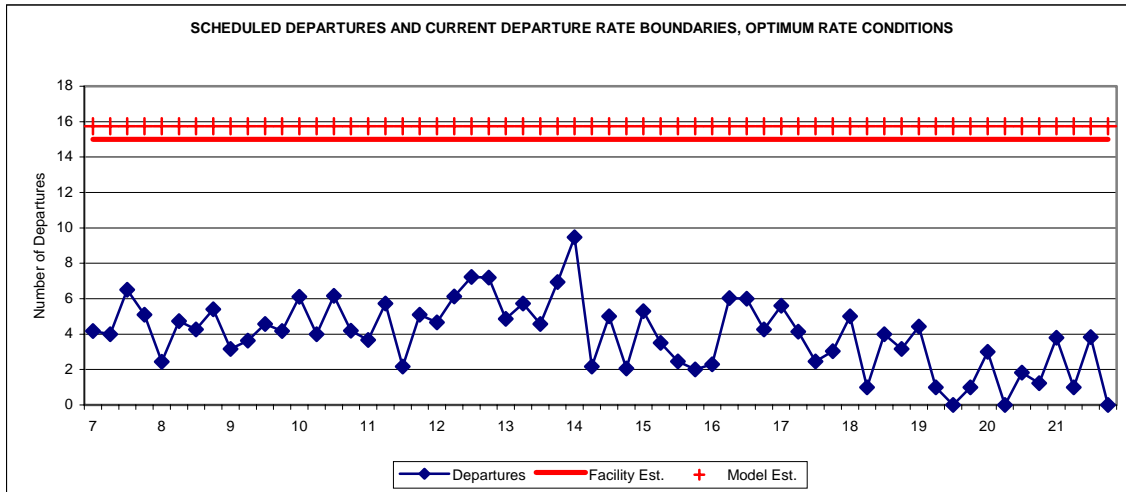
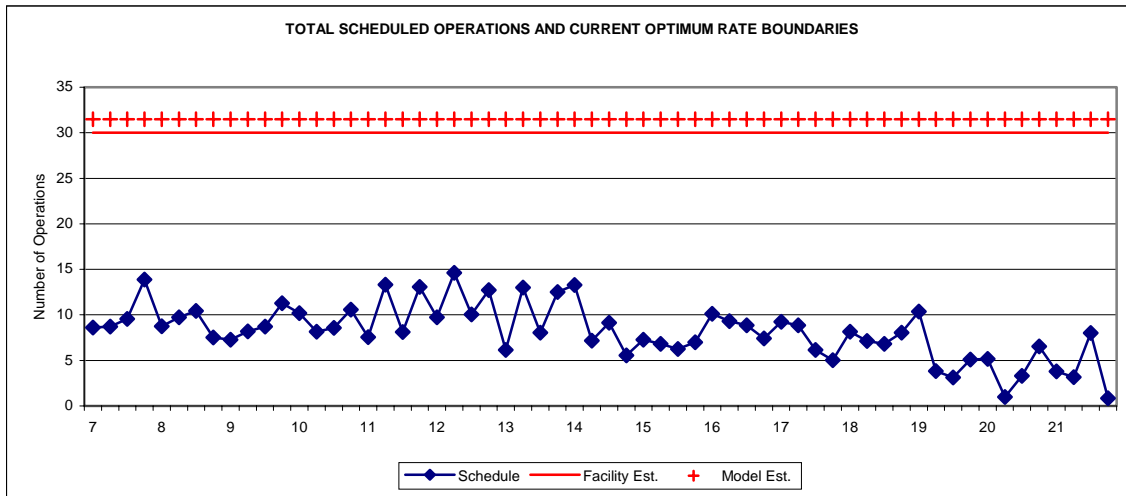
The list of Planned Improvements and their expected effects on capacity does not imply FAA commitment to or approval of any item on the list.

Current Operations – Optimum Rate

- Visual approaches, visual separation – Optimum Rate of Optimum Rate:
 - Arrive: 8L, 4L/R = 60 Arrivals
 - Depart: 8L/R, 4L/R (under 22,500 lbs): = 60 Departures
- Actual hourly traffic counts for the month of April 2000 were not available
- Solid line represents the airport capacity during a busy hour calculated by the FAA Airport Capacity Model, assuming two independent arrival operations, showing the tradeoff between arrival and departure rates
- The capacity model can only approximate the operations at HNL

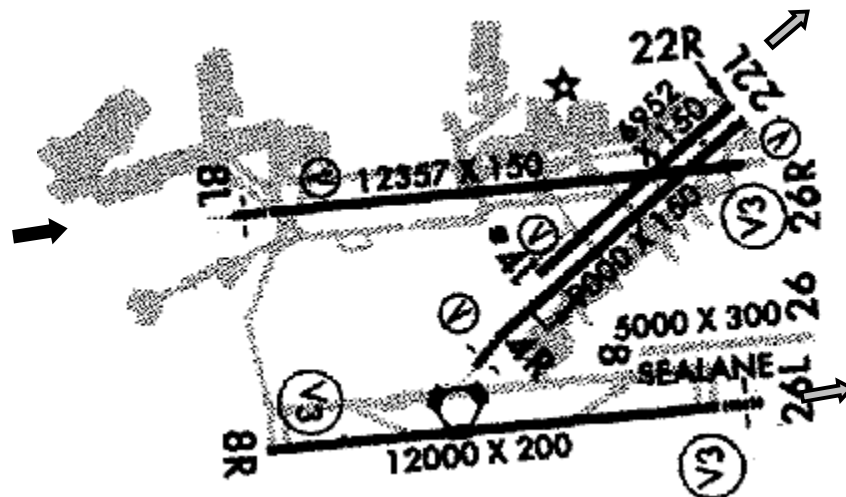
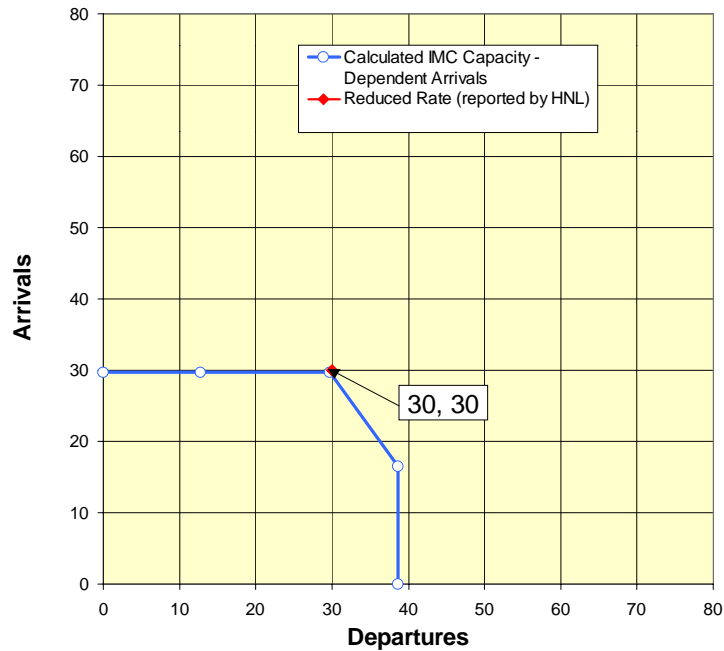


Scheduled Departures and Arrivals and Current Departure and Arrival Rate Boundaries (15-Minute Periods) Under Optimum Rate Conditions



Current Operations – Reduced Rate

- Instrument approaches (below Visual Approach Minima)
 - Arrive: 8L 30 arrivals
 - Depart: 8L 30 Departures
- The Departure Rate is reduced because currently HNL cannot conduct Arrival/Departure LAHSO
- ASPM data for “Instrument Approaches” not available
- Chart below represents expected rates in terms of operations per hour



Scheduled Departures and Arrivals and Current Departure and Arrival Rate Boundaries (15-Minute Periods) Under Reduced Rate Conditions

